THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JERRY P. RICHARD,
RICHARD O'BRYANT,
and VERLON P. HARMON

Appeal No. 96-2894
Application 07/742,974[1]

ON BRIEF

Before BARRETT, GROSS, and FRAHM, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

[1] Application for patent filed August 9, 1991, entitled "System And Method For The Delivery, Authoring, And Management Of Courseware Over A Computer Network."

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-19 and 27-32.

We affirm-in-part.

BACKGROUND

The disclosed invention is directed to computer aided instruction and in particular to a system and method for delivery, authoring, and management of courseware over a computer network.

Claims 9, 13, and 19 are reproduced below.

> 9. A computer aided instruction system, comprising:
>
> a network of interconnected servers;
>
> a main computer connected to at least one of said servers;
>
> a repository connected to said main computer;
>
> at least one workstation connected to one of said servers; and
>
> a course delivery system distributed over said at least one workstation, said servers, and said main computer to deliver a course from said at least one workstation to said repository.
>
> 13. A method for managing courseware in a computer network environment, comprising the steps of:

storing courses in a repository;

transporting said courses over a network to selected servers of said network;

responding to a request for a course made on a workstation;

delivering said course to a server serving said workstation; and

downloading an execution module to said workstation.

19. A method enabling a student to execute courseware, comprising the steps of:

downloading an executable module to a workstation;

retaining a control module on a server serving the workstation;

sending messages from said executable module to said control module; and

verifying prior authorizations of said student for executing said courseware.

The examiner relies on the following prior art:

Andersen et al. (Andersen)	4,636,174	January 13, 1987
Abrahamson et al. (Abrahamson)	5,002,491	March 26, 1991

Claims 27-32 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.

Claims 1-8 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention.

Claims 9 and 13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Andersen.

Claim 19 stands rejected under 35 U.S.C. § 103 as being unpatentable over Andersen.

Claims 1-8, 10-12, and 14-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Andersen and Abrahamson.

We refer to the Final Rejection (Paper No. 8) (pages referred to as "FR__") and the Examiner's Answer (Paper No. 13) (pages referred to as "EA__") for a statement of the examiner's position and to the Brief (Paper No. 12) (pages referred to as "Br__") and the Reply Brief[2] (Paper No. 14)

[2] The Reply Brief was initially denied entry by the letter entered August 17, 1994 (Paper No. 15), but has been entered as noted in the letter entered February 22, 1996 (Paper No. 18).

(pages referred to as "RBr__") for appellants' arguments thereagainst.

OPINION

35 U.S.C. § 101

The examiner rejects claims 27-32 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter "because the claimed subject matter: (A) does not fall within any of the four statutory classes of § 101; and/or (B) falls, by analogy, within the printed matter exception to § 101 or within a new exception to computer programs per se" (Paper No. 2, page 2).

While we agree that certain kinds of subject matter do not fall within any of the four statutory classes, e.g., poems and musical works, claims 27-32 comprise a series of steps and, thus, clearly fall within the statutory class of a "process." See In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("Thus a series of steps is a 'process' within § 101 unless it falls within a judicially determined category of nonstatutory subject matter exceptions."). This reason for the § 101 rejection is reversed.

Claims 27-32 are directed to a process and not to printed matter or a computer program per se. The steps of creating application code with certain properties, such as transfer of control from a hook point to an embedded training routine, is not the same thing as a computer program per se. If the claims were to "a computer program having instructions to do function X, instructions to do function Y, etc." a rejection for not being within the four statutory classes or a printed matter/computer program rejection might be appropriate. However, in this case we will not look beyond the process form of the claim. This reason for the § 101 rejection is reversed.

In conclusion, the § 101 rejection of claims 27-32 is reversed.

35 U.S.C. § 112, second paragraph

The examiner states (EA3):

> In claim 1, what is meant by "where a course resides"? No storage of a "course" is seen; nor storage at a server. The phrase "wherein said course is in said repository and at said servers" is vague - what is meant by "in" and "at". [sic, ?]

As to "where a course resides," appellants argue that the examiner has confused breadth with indefiniteness and

that appellants are not required to recite storage of the course at the server (Br10).

It is clear to us that the complete limitation "said server where a course resides" means that the course is stored in some manner at the server. It is not necessary to specify how the course is stored (i.e., "resides") in the server. This reason for the § 112, second paragraph, rejection is reversed.

As to the language "wherein said course is in said repository and at said servers," appellants argue that "this claim language further defines of [sic] the previously recited claim language of 'a distributed delivery system responsive to a request of the server for a course of the courseware' and 'authoring to transfer courses of the courseware from the workstation to the repository'" (Br10).

We do not understand appellants' argument. However, we see nothing vague about the words "in" and "at." It would have the same meaning to say the course is at the repository and at the servers or in the repository and in the servers. This reason for the § 112, second paragraph, rejection is reversed.

In conclusion, the § 112, second paragraph rejection of claims 1-8 is reversed.

35 U.S.C. § 102(b)

"Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Claim 9

Appellants argue (Br13, third para.) that Andersen does not disclose the following limitations in the last subparagraph of claim 9 (numbers in brackets added): "[1] a course delivery system distributed over said at least one workstation, said servers, and said main computer [2] to deliver a course from said at least one workstation to said repository."

The examiner's position is as follows (FR5):

(e) a course delivery system see 6:46, 5:56-58; 6:3-9;
information is distributed

The examiner further states (EA7-8): "However, as admitted by Appellant, Anderson [sic] does show that programs are transmitted over the network. Why such transmission is not a 'distributed delivery' Appellant fails to point out."

The limitation to "a course delivery system distributed over said at least one workstation, said servers, and said main computer" is considered to broadly read on Andersen. In Andersen, a plurality of instructional programs are transferred from a central main frame computer (corresponding to the claimed "main computer") to a mass storage device 14 in a cluster subsystem 10 (corresponding to the claimed "server") over a link 15 (col. 6, lines 41-50) which maintains a number of entire instructional programs in a high speed buffer 12 (col. 6, lines 19-27) and segments of the program are transmitted to a requesting processor station (corresponding to the claimed "workstation") as needed (col. 5, lines 56-58). Since the programs or parts of the programs reside at the central computer, the cluster subsystem, and the processor, the course delivery system is "distributed." Unlike claim 1, there are no limitations that the distributed delivery

system is "selectively operable to search said network of said servers for said server where said course resides, operable to transfer said course from said server where said course resides, and selectively operable to retrieve said course from said repository if said course cannot be found at said server."

However, claim 9's limitation "to deliver a course from said at least one workstation to said repository" (emphasis added) is not found in Andersen. Andersen delivers programs from the central computer to the processor, not in the other direction. We do not find where examiner addresses this limitation. As appellants point out with respect to a similar limitation in claim 1 (Br12): "Very clearly, the segmented instructional program are [sic] transmitted from the cluster sub-system to the requesting processor stations." Since Andersen does not disclose delivering a course from the processor to the central computer (which has a repository), the anticipation rejection of claim 9 must be reversed.

Claim 13

Appellants argue (Br11, first full para.) that Andersen does not disclose the following limitations in claim 13: (1) "storing courses in a repository"; and (2) "responding to a request for a course made on a workstation; delivering said course to a server serving said workstation."

As to the limitation of "storing courses in a repository," appellants argue (Br14, lines 7-12):

> Andersen discloses at column 5, lines 53-56 that the electronic memory at the processor station does not have [the] capacity to store a single instructional program. Thus, since Andersen could not store a single instructional program, certainly Andersen could not store a plurality of instructional programs.
>
> As a consequence, Andersen does not disclose or suggest storing courses in a repository.

The examiner responds (EA8): "Appellants['] point, page 14, beginning [at] line 7 through line 10 of the Brief, is not well taken in that no storage of a plurality of courses at a workstation is seen anywhere in the instant claim[] [13]."

Appellants argue that Andersen does not disclose the claim language "storing courses in a repository." Manifestly, the central computer in Andersen must inherently have a repository for storing courses since courses are

downloaded from the central computer to the mass storage 14 of the cluster subsystem 10 over communication link 15 (col. 6, lines 41-49). However, claim 13 does not require any particular location for the repository. The repository could be the mass storage 14 of one of the cluster subsystems 10 in Andersen. Therefore, we find that Andersen teaches "storing courses in a repository." Appellants' arguments that the processor, which corresponds to the claimed "workstation," does not have the capacity to store courses is not commensurate in scope with claim 13.

As to the limitation "responding to a request for a course made on a workstation; delivering said course to a server serving said workstation," appellants argue (Br14, lines 14-18): "Presuming arguendo that the requesting processor station of Andersen corresponds to the workstation of the present invention, clearly Andersen does not disclose or suggest that the instructional programs delivered to the cluster substation are in response to a request from the processor station."

The examiner responds (EA8): "With respect to Appellants['] points, page 14, lines 12-18 [sic, 13-19],

note Andersen et al., col. 6, lines 24-25 and the lange [sic, language] 'when a particular processor station requests a particular program ...' (emphasis added)."

The issue is more complicated than the examiner appreciates and involves a matter of claim interpretation. Andersen discloses downloading a program segment for execution (col. 3, lines 65-66) from the cluster subsystem 10 (corresponding to the claimed "server") to a processor station 20 (corresponding to the claimed "workstation") in response to a request for a particular program from the processor (col. 6, lines 23-27). This meets the claim language of "responding to a request for a course made on a workstation"; note that this language does not state what actions are taken in "responding."

The following clause of claim 13 recites "delivering said course to a server serving the workstation." Appellants interpret this clause as requiring delivering in response to the request in the preceding clause, which argument the examiner does not address. However, there is no specific language in claim 13 to support appellants' argument that "delivering" is done in response to the

"request." Nor is there any specific requirement that the steps take place in the exact order recited. The step of "delivering said course" can be the downloading of instruction programs from the central computer to the cluster substation from where they are requested. Inferential limitations are not to be read into the claims. In re Priest, 582 F.2d 33, 37, 199 USPQ 11, 15 (CCPA 1978). Appellants could have drafted claim 13 to recite that delivering was done in response to the request. We find that Andersen teaches "responding to a request for a course made on a workstation; delivering said course to a server serving said workstation."

For the reasons discussed above, we sustain the anticipation rejection of claim 13. We only address the arguments made by appellants.

35 U.S.C. § 103

Claims 1-8

Appellants argue that the combination of Andersen and Abrahamson does not disclose the following limitations of claim 1 (Br12, first para.) (numbers in brackets added): "[1] the main computer including a repository for storing

courseware and [2] the authoring system distributed over the workstation of the workstations, the servers, and the main computer and [3] operable to transfer courses of the courseware from the workstation to the repository . . . ." Appellants also argue (Br12) that the combination of Andersen and Abrahamson does not disclose the "distributed delivery system."

The examiner stated that "Anderson [sic] lacks in [sic] showing [of] a main computer repository for storing courseware" (Paper No. 2, page 6), but that "[r]egarding a main computer file repository, such would have been an obvious economic expedient, as well as provide [sic] system backup [to] reduce the need for repeating software in all of the Anderson [sic] hubs" (Paper No. 2, pages 6-7). In our opinion, the central computer in Andersen must inherently have a repository for storing courses since courses are downloaded from the central computer to the mass storage 14 of the cluster subsystem 10 over communication link 15 (col. 6, lines 41-49), but we agree with the examiner that providing a central repository would have been obvious. Appellants provide no explanation why providing a course

repository in the main computer would have been nonobvious. Therefore, we find that Andersen discloses or suggests "storing courses in a repository."

As discussed in connection with claim 9, since the programs or parts of the instructional programs in Andersen reside at the central computer, the cluster subsystem, and the processor, the instructional programs are "distributed."

However, claim 1's limitation that the authoring system is "operable to transfer courses of said courseware from said workstation to said repository" (emphasis added) corresponds to a similar limitation in claim 9 and is not found in Andersen. Andersen delivers programs from the central computer to the processor, not in the other direction. We do not find where the examiner addresses this limitation. As appellants point out (Br12): "Very clearly, the segmented instructional program are [sic] transmitted from the cluster sub-system to the requesting processor stations." Since Andersen does not disclose delivering a course from the processor to the central computer (which has a repository), and since Abrahamson does not cure this

deficiency, the rejection of claim 1 is reversed. The rejection of dependent claims 2-8 is also reversed.

In addition, we note that the rejection of claims 1-8 must be reversed because neither Andersen nor Abrahamson discloses the limitations in the "distributed delivery system" subparagraph in claim 1. We find no discussion of these specific limitations about searching the network and transferring and retrieving courses in the examiner's actions.

Claims 10-12

The rejection of independent claim 9 over Andersen has been reversed. Abrahamson does not supply the deficiency as to claim 9's limitation "to deliver a course from said at least one workstation to said repository." Accordingly, the rejection of claims 10-12 is reversed.

Claims 14-18

As to claims 14-18, appellants merely recite the limitation of each claim and the advantage of the feature. This does not constitute an argument as to the separate patentability of the claims. See 37 CFR § 1.192(c)(6)(iv)

(1993) ("For each rejection under 35 U.S.C. 103, the argument shall specify the errors in the rejection . . ."). Cf. 37 CFR § 1.192(c)(7) (1997) ("Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable."). Because appellants have not argued the merits of the rejection or shown error in the examiner's position, the rejection of claims 14-18 is sustained.

Claim 19

Appellants argue that the combination of Andersen and Abrahamson does not teach the step of "verifying prior authorizations of said student for executing said courseware." This is the only issue argued with respect to claim 19.

The examiner admits that Andersen does not disclose verifying authorization of the user (FR3). The examiner states (FR5-6):

> Regarding applicants['] request to provide a teaching in the prior art of at least authorization/verification, the Examiner takes notice on record that, for at least the past five years, a user identification and password are required for access to the PTO computer network, and that such was the requirement while the Examiner attended college

> during the 1980's. Passwords were/are used to prevent unauthorized use of computer facilities, and the Examiner will happily execute an Affidavit to such effect if deemed necessary a [sic] applicant.
>
> Appellants argue (Br14-15):
>
> [P]resuming arguendo that knowledge of one of ordinary skill in the art at the time of the invention would include mere verification or authorization, this does not disclose or suggest verifying prior authorization of the student for executing the courseware. The allegations in the Office Action appear to simplify the language of the claims, and the Applicants remind the Honorable Board that all of the claimed limitations must be met by teaching of the prior art in order to sustain a rejection under 35 USC § 103.

Appellants further argue that the examiner has failed to provide any evidence for the method step of verifying prior authorizations of the student for executing the courseware and "[t]he Applicants remind the Honorable Board that the Examiner's mere offer to supply an affidavit does not have the same effect as an actual affidavit being submitted" (Br15).

We interpret appellants' arguments in the best possible light as not contesting the examiner's taking official notice of the fact that verifying a password as authorization for logging onto a computer was well known in the prior art, but as arguing that such fact does not meet

the step of "verifying prior authorizations of said student for executing said courseware." There can be no question, especially to appellants in this case assigned to Texas Instruments Corporation, that the examiner's finding that verifying a password as authorization for logging on to a computer was notoriously well known in the art at the time of the invention is correct. Applicants may easily traverse findings of well-known fact by official notice by either denying that the fact was well known or that it was not known by applicants. Merely stating that the facts are not expressly taught in a reference is not sufficient. In the situation where an applicant or representative knows the examiner's assertion of well-known facts is correct, it would be misleading and, in our opinion, a violation of 37 CFR § 1.56 to assert that the matter is not expressly shown in the prior art and to insist on an affidavit or other evidence.

We consider that the well-known procedure of verifying a password as authorization for a user to log on to a computer also serves as authorization for the user to execute software on the computer. The step of "verifying

prior authorizations of said student for executing said courseware" is broad enough to read on this procedure. It was also known long before the filing date of this application that passwords were used to provide authorization to use certain programs, e.g., programs such as LEXIS/NEXUS which charge a fee for use and must have some way of identifying the users for billing purposes. In view of these facts, it would have been obvious to verify authorizations of students to execute the instructional programs in Andersen because this limits access to those students who have registered and paid for the course. For these reasons, the rejection of claim 19 is sustained.

CONCLUSION

The rejections of claims 1-12 and 27-32 are reversed.

The rejections of claims 13-19 are sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

LEE E. BARRETT Administrative Patent Judge	)	
ANITA PELLMAN GROSS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ERIC S. FRAHM Administrative Patent Judge	)	

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